ENVIRONMENTAL COMPLIANCE ENTERPRISE ARCHITECTURE
CONCEPT OF OPERATIONS 2

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

PROJECT TRACKING SYSTEM

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1.0 INTRODUCTION

1.1 REPORT PURPOSE

The purpose of this Concept of Operations Document is to describe the Project Tracking System (PTS), why it is being developed, and its relationship with NOAA and Environmental Compliance Program's missions and goals.

1.2 SCOPE OF PROJECT TRACKING SYSTEM (PTS)

The Project Tracking System (PTS) is an automated computer application that will be used throughout NOAA to provide the ability to input, update, view, and print environmental project information.

1.3 BACKGROUND

1.3.1 REASON PROJECT TRACKING SYSTEM DEVELOPED

A material weakness of the National Oceanic and Atmospheric Administration's (NOAA) Financial Statements for Fiscal Year 1996, as determined by KPMG Peat Marwick, was that "Environmental Liabilities are not properly documented, maintained, or estimated." This weakness was a repeat condition from Fiscal Year 1995. Among the recommendations associated with the KPMG Peat Marwick report were the need to:

> "Prepare written procedures to properly operate and maintain its [NOAA's] environmental liabilities central database, including requiring documentation to support environmental remediation estimates" and "Use the Regional Environmental Coordinator's (RECO) in establishing which estimated environmental costs are probable, reasonably possible or remotely possible, to report the estimated environmental liability on NOAA's financial statements."

The NOAA Corrective Action Plan included a number of steps which apply to the process of developing and maintaining the central database of environmental liabilities, which is a subset of NOAA's environmental project database.

1.3.2 PROJECT TRACKING SYSTEM & NOAA MISSION AND GOALS

Critical elements in fulfilling NOAA's mission are protecting the environment and complying with environmental regulations. The PTS will allow NOAA to better maintain, track and facilitate compliance with environmental regulations.

1.3.3 PROJECT TRACKING SYSTEM & ENVIRONMENTAL COMPLIANCE MISSION AND GOALS

NOAA's Environmental Compliance Program mission mirrors those discussed above. Three goals have been established with this mission:

1. Restore contaminated properties caused by NOAA

2. Ensure environmental compliance through pollution prevention; and
3. Sustain environmental compliance through an environmental management system.

1.3.4 PROJECT TRACKING SYSTEM MISSION, GOALS, AND OBJECTIVES

The central database incorporates a variety of data fields necessary for complete reporting and documentation of budgetary and regulatory requirements[1]. Implicit in the database is the capability to record all financial environmental liabilities. The central database will adhere to the following general environmental project management policies as specified in the guidance:

1. Contracted staff, under the direction of NOAA Headquarters (NOAA HQ) Environmental Compliance Staff, will maintain the central project database. Maintaining the database at headquarters will ensure data integrity thus promoting uniformity in the level of project reporting detail, and reduce the risk of project error and duplication among the environmental compliance offices. Maintaining the database by headquarters will also allow key NOAA staff continuos access to environmental project information.

2. The central database will include all information required to support the development of the environmental compliance portion of NOAA's budgets, spending plans, annual financial statements, and reporting requirements (e.g., Environmental Protection Agency (EPA) FedPlan). The data fields were created by compiling previously used NOAA data fields, data fields from specific reporting requirements, and additional suggested fields.

3. The final policy specification requires the database to utilize electronic methods to the maximum extent possible in maintaining, sharing, and transferring project information (see NOAA Environmental Compliance Policy 97-02—NOAA Environmental Project Management Policy 30 Sep 97). The central database has the ability to mesh with other NOAA computing capabilities and to expand to the RECOs and beyond, offering significant data interchange possibilities.

2.0 Core Functions of Project Tracking System

The core functions outlined and described herein are categorized into 6 top-level areas and shall serve as the template in future development efforts such as user requirements, database design, user application development, and system implementation. These functions shall encompass the standard database functions such as query, populate data, update, display, reporting, etc..

2.1 Core Function *Generate Reports*

Performed by: Data administrator
Location: Off-site contractor, DC Metropolitan area
Description: FedPlan reports, Chief Financial Officers Act (CFO) reports, Government Performance and Results Act (GPRA) reports, Project Status Reports, NOAA Project Management Policy

[1] For more details, see "NOAA Guidance on Financial Environmental Liabilities."

2.1.1 Subfunction: Generate FedPlan Report
Performed by: Data administrator
Location: Off-site contractor, DC Metropolitan area
Description: The EPA requires federal agencies to annually submit information on their environmental projects. The FedPlan report maintains and tracks project information such as project location, points of contact, project categories, and cost information.
How Task Performed: (1) extract data, (2) format data, (3) simultaneously send data to ECS HQ Deputy Director and to EPA contractor (Scicomm).
Information Used: See Appendix A
Drivers: EPA annual FedPlan data call

2.1.2 Subfunction: Generate CFO Report
Performed by: Data administrator
Location: Off-site Contractor, DC Metropolitan area
Description: Each year NOAA must report their financial liabilities in accordance with the CFO Act.
How Task Performed: (1) extract data, (2) format data, (3) send data to ECS HQ Deputy Director
Information Used: project number, project name, program, ASC, LO, State in which project is located, facility name, project priority score, environmental project category, financial liability probability, project description, total cost estimate, amount funded, actual cost, date completed, and notes.
Drivers: CFO Act

2.1.3 Subfunction: Generate GPRA Report
Performed by: Data administrator
Location: Off-site Contractor, DC Metropolitan area
Description: NOAA must comply with this act by reporting and documenting progress towards its performance goals of reducing the number of environmental projects and its financial liabilities.
How Task Performed: (1) extract data, (2) format data, (3) send data to ECS HQ Deputy Director
Information Used: number of environmental projects for fiscal year, number of environmental projects in past fiscal years, total environmental liability for fiscal year, total environmental liability for past fiscal years, number of new environmental projects for fiscal year, number of closed environmental projects for fiscal year.
Drivers: GPRA

2.1.4 Subfunction: Generate Project Status Reports
Performed by: Data administrator
Location: Off-site contractor, DC Metropolitan area
Description: Provides a summary of the most current project information.
How Task Performed: (1) extract data, (2) format data, (3) send data to ECS HQ Deputy Director

Information Used: project number, project name, program, ASC, LO, state where project is located, facility name, project priority score, environmental project category, financial liability probability, project description, total cost estimate, amount funded, actual cost, date completed, and notes.
Drivers: Best Management Practice and NOAA policy on managing projects.

2.1.5 Subfunction: Generate CERCLA reports
Performed by: Data Administrator
Location: Off-site contractor, DC Metropolitan area
Description: Provides project data to meet the requirements of the CERCLA Annual Report to Congress on Cleanup activities and other CERCLA requirements.
How Task Performed: (1) extract data, (2) format data, (3) submit data to ECS HQ Deputy Director
Information Used: project funding, state where project takes place, narrative/project description, and notes.
Drivers: CERCLA

3.1 Core Function *Manage Budgets*
Performed by: LO, RECO, ECS HQ Deputy Director
Location: LO, RECO, ECS HQ
Description: Generate cost estimate, HQ review and approval, funding allocation and notification, track expenditures, calculate final costs, conduct budgetary comparison. This core function allows NOAA to monitor their budgets, amount spent, amount funded, and historical activity. This core function's output provides NOAA HQ with key reporting information to such agencies as Commerce, EPA, and Congress.

3.1.1 Subfunction: Generate Cost Estimate
Performed by: Regional and line office environmental compliance officers, ECS HQ Deputy Director
Location: ASC, LO
Description: Provides total cost estimates and cost estimates by fiscal year for environmental compliance projects.
How Task Performed: (1) LO and RECO calculate a cost estimate, (2) submit cost estimate to ECS HQ Deputy Director for review and approval (3) data entered
Information Used: project type, contractor proposal, cost estimates for similar projects
Drivers: FedPlan, reporting requirements, environmental compliance corrective action plans

3.1.2 Subfunction: HQ Review and Approval
Performed by: ECS HQ Deputy Director
Location: ECS HQ
Description: check data against personal experience and best management practices
How Task Performed: (1) LO and RECO calculate cost estimate, (2) submit cost estimate to ECS HQ Deputy Director for review and approval
Information Used: project description, cost estimate, project duration
Drivers: NOAA Project Management Policy, KPMG Audits

3.1.3 Subfunction: Funding Allocation and Notification
Performed by: ECS HQ Deputy Director
Location: ECS HQ
Description: identifies a budget number and the amount of money funded for a project per fiscal year.
How Task Performed: (1) ECS HQ Deputy Director determines the amount, if any, to be funded, (2) ECS HQ Deputy Director notifies and transfers the appropriate amount of money.
Information Used: project number, project point of contact information, project name, budget number and funded amount
Drivers: FedPlan, KPMG audits

3.1.4 Subfunction: Track Expenditures
Performed by: RECO, ECS HQ Deputy Director
Location: ASC
Description: monitor the amount of labor and material dollar expended against the project.
How Task Performed: (more information is needed from LO, RECOs and ECS HQ Deputy Director)
Information Used: Original balance, current balance, project number, budget number
Drivers: FedPlan, CFO, best management practices

3.1.5 Subfunction: Calculate Final Costs
Performed by: RECOs, ECS HQ Deputy Director
Location: ASC, ECS HQ
Description: summarize project expenditures
How Task Performed: (more information is needed from LO, RECOs and ECS HQ Deputy Director)
Information Used: project start date, project stop date, project number, total expenditures, budget number
Drivers: FedPlan, CFO, best management practices

3.1.6 Subfunction: Conduct Budgetary Comparison
Performed by: ECS HQ Deputy Director
Location: ECS HQ
Description: provides fiscal year to fiscal year budgetary information allowing NOAA to conduct various analyses (i.e. Cost estimate vs. actual cost)
How Task Performed: (1) extract data (2) ECS HQ Deputy Director analyzes
Information Used: cost estimates, actual costs, amount funded, project number
Drivers: FedPlan, User needs, KPMG

4.1 Core Function *Administer Compliance*
Performed by: LO, RECO, ECS HQ Deputy Director
Location: LO, ASC, ECS HQ

Description: maintain governing documentation, identify project compliance, coordinate project compliance, review and approve project compliance, monitor projects against new regulations. This core function tracks and monitors whether or not a project is in compliance with regulations, executive orders, policies and procedures, state mandates, and any other governing specification.

4.1.1 Subfunction: Identify Project Compliance
Performed by: LO
Location: LO
Description: analysis of project to identify environmental compliance violations
How Task Performed: (1) analyze projects
Information Used: project name, project number, environmental laws and regulations, environmental category, project type, project description, compliance class, compliance status
Drivers: FedPlan, CFO Act, KPMG Audits

4.1.2 Subfunction: Coordinate Project Compliance
Performed by: LO, RECO
Location: LO, ASC
Description: LO and RECO confer and agree on the project's compliance
How Task Performed: (1) analyze projects (2) LO and RECO reach a consensus
Information Used: project name, project number, environmental laws and regulations, environmental category, project type, project description, compliance class, compliance
Drivers: FedPlan, CFO Act, KPMG Audits

4.1.3 Subfunction: Review & Approve Project Compliance
Performed by: ECS HQ Deputy Director
Location: ECS HQ
Description: ECS HQ reviews and approves the LO/RECO project compliance data
How Task Performed: (1) project compliance data submitted to ECS HQ (2) ECS HQ Deputy Director reviews and approves data
Information Used: Project type, environmental category, compliance class, compliance status, project name, project number, environmental laws & regulations
Drivers: FedPlan, CFO, KPMG Audits, NOAA Project Management policy, best management practice

4.1.4 Subfunction: Monitor Projects against new regulations
Performed by: LO, RECO
Location: LO, ASC
Description: Review and update new projects against any new regulations
How Task Performed: (1) LO and RECO identify and analyze new regulations (2) LO and RECO review current projects against these new regulations (3) LO and RECO update projects to match these new regulations
Information Used: environmental laws & regulations, project name, project number, project description, compliance status, compliance class
Drivers: FedPlan, best management practice, NOAA Project Management Policy

5.1 Core Function *Regulate Liabilities*
Performed by: ECS HQ Deputy Director, RECO
Location: ASC, ECS HQ
Description: calculate project priority, estimate project financial liabilities, monitor project status against liabilities, provide inputs for reports outside of NOAA. This core function tracks project financial liabilities and the associated amounts. In addition, it utilizes the priority core function in allowing NOAA HQ/ECS to re-evaluate project priorities

5.1.1 Subfunction: Calculate Project Priority
Performed by: RECO, ECS HQ Deputy Director
Location: ASC, ECS HQ
Description: Determine on a scale from 1-10 the importance of completing the project
How Task Performed: (1) RECO generates score based on project type, potential for liability, etc. (2) ECS HQ reviews and approves (3) data entered
Information Used: Project type, liability probability, environmental category, environmental laws & regulations, compliance class, compliance status, project name, project number, project description, final compliance required date
Drivers: FedPlan, best management practice, NOAA Project Management Policy, CFO, KPMG audits, Annual budget

5.1.2 Subfunction: Estimate Project Financial Liabilities
Performed by: RECO, ECS HQ Deputy Director
Location: ASC, ECS HQ
Description: identifies probability of liability and cost associated with it
How Task Performed: (1) RECO identifies potential for liability (2) ECS HQ reviews and approves (3) data entered
Information Used: notes, liability probability, project name, project number, environmental laws & regulations, final compliance required date, compliance status, compliance class, project description
Drivers: CFO, KPMG audits, Annual budget, NOAA Project Management Policy

5.1.3 Subfunction: Monitor Project Status against Liabilities
Performed by: RECO, LO, ECS HQ Deputy Director
Location: ASC, LO, ECS HQ
Description: Identifies project status to make sure project is completed before it becomes a liability
How Task Performed: (1) LO and RECO identifies project status (2) ECS HQ reviews status
Information Used: liability probability, compliance class, compliance status, priority score, project name, project number, final compliance required date
Drivers: CFO, KPMG audits, NOAA Project Management Policy

5.1.4 Subfunction: Provide Inputs for Reports
Performed by: LO, RECOs

Location: all NOAA regions
Description: those responsible for the projects must submit information to support the reporting process and all the other core functions
How Task Performed: (1) off-site contractor requests data submittals from RECOs (2) RECOs solicit information from LOs and provide additional information (3) ECS HQ Deputy Director reviews and approves data (3) off-site contractor inputs data
Information Used: See Appendix A and Appendix G

6.1 Core Function Manage Project Priority
Performed by: LO, RECO, ECS HQ Deputy Director, Data Administrator
Location: LO, ASC, ECS HQ, Off-site contractor in DC Metropolitan area
Description: maintain FedPlan/EPA prioritization method, calculate priority according to FedPlan/EPA method, coordinate calculated priority, HQ Review and approve priority, override project priority when necessary. The Manage Project Priority core function provides the user with a scheme or method to calculate the project priority in accordance with Fedplan/EPA guidelines. In addition, this function allows NOAA HQ/ECS to modify or override priorities assigned by RECOs and LOs when necessary.

6.1.1 Subfunction: Maintain FedPlan/EPA Prioritization Method
Performed by: data administrator
Location: Off-site contractor, DC metropolitan area
Description: update PTS prioritization scheme to reflect EPA mandated method when and if changes are needed
How Task Performed: (1) EPA/Scicomm issue a revision to FedPlan (2) Off-site contractor modifies PTS to meet new requirements
Information Used: bureau, local and priority scores, priority ranges, compliance status and class, compliance status priority range
Drivers: FedPlan

6.1.2 Subfunction: Calculate project priority according to FedPlan/EPA
Performed by: LO, RECO
Location: LO, ASC
Description: provides answer and question routine to calculate a project's priority in accordance with FedPlan/EPA criteria.
How Task Performed: (1) LO follows scheme to generate project priority score (2) submits this score to RECO
Information Used: environmental category, compliance class, compliance status, project type, liability probability, final compliance required date, priority scores
Drivers: FedPlan

6.1.3 Subfunction: Coordinate Calculated Priority
Performed by: LO, RECO
Location: LO, ASC
Description: LO and RECO confer and agree upon the project's priority score
How Task Performed: (1) analyze projects (2) LO and RECO reach a consensus

Information Used: environmental category, compliance class, compliance status, project type, liability probability, final compliance required date, priority scores
Drivers: FedPlan

6.1.4 Subfunction: HQ Review & Approve Priority
Performed by: ECS HQ Deputy Director
Location: ECS HQ
Description: ECS HQ reviews and approves the LO/RECO project priority score
How Task Performed: (1) project priority data submitted to ECS HQ (2) ECS HQ Deputy Director reviews and approves data
Information Used: environmental category, compliance class, compliance status, project type, liability probability, final compliance required date, priority scores
Drivers: FedPlan

6.1.5 Subfunction: Override priority if necessary
Performed by: ECS HQ Deputy Director
Location: ECS HQ
Description: allows ECS HQ to increase or decrease a project priority score when necessary
How Task Performed: (1) ECS HQ identifies a situation which may require a change in priority scores such as, new regulations or compliance issues (2) ECS HQ changes the priority scores
Information Used: environmental category, compliance class, compliance status, project type, liability probability, final compliance required date, priority scores
Drivers: FedPlan, best management practice,

7.1 Core Function *Administer Project Inventory*
Performed by: LO, RECO
Location: LO, ASC
Description: monitor project status, monitor project progress, identify and monitor initiatives, identify environmental categories, coordinate environmental categories, identify and maintain facility info, identify and maintain POC info, identify and maintain location info. The Administer Project Inventory core function tracks and monitors all project amplifying information such as categories, status, project location(s), and responsible facilities and points of contact.

7.1.1 Subfunction: Monitor Project Status
Performed by: LO, RECO
Location: LO, ASC
Description: track and monitors project statuses such as open, closed, work date complete, design date complete, progress in accordance with EPA criteria, etc..
How Task Performed: (1) LO and RECO track the project's status (2) report the status to ECS HQ
Information Used: project progress codes, compliance class, compliance status, compliance required date, reason project discontinued, design complete date, date project

entered, date project revised, FY project complete, project name, project number, notes, work date start
Drivers: FedPlan, best management practice

7.1.2 Subfunction: Identify and Monitor Initiatives
Performed by: LO, RECO
Location: LO, ASC
Description: tracks and monitors geographic initiatives and project start and stop reasons, in accordance with EPA criteria.
How Task Performed: (1) LO and RECO track the project's status (2) report the status to ECS HQ
Information Used: project start reason, project stop reason, liability probability, geographic initiatives, project name, project number
Drivers: FedPlan, GPRA, best management practice

7.1.3 Subfunction: Identify Environmental Categories
Performed by: LO
Location: LO
Description: identify the environmental category the project represents
How Task Performed: (1) LO analyzes project (2) LO identifies the category (3) LO submits info to RECO
Information Used: environmental categories, project type, program area, project description
Drivers: FedPlan, User needs

7.1.4 Subfunction: Coordinate Environmental Categories
Performed by: LO, RECO
Location: LO, ASC
Description: LO and RECO confer and agree upon the project's environmental category
How Task Performed: (1) analyze projects (2) LO and RECO reach a consensus
Information Used: environmental categories, project type, program area, project description
Drivers: FedPlan, User needs, best management practice

7.1.5 Subfunction: Identify and maintain facility info
Performed by: LO, RECO, data administrator
Location: LO, ASC, Off-site contractor DC metropolitan area
Description: tracks responsible facilities and associated amplifying information such as address, phone numbers, and agency/bureau.
How Task Performed: (1) LO and/or RECO identify a change to facility info (2) submit the change to ECS HQ (3) data administrator enters data change
Information Used: facility latitude/longitude, facility address, facility name, facility phone, fax, email
Drivers: FedPlan, best management practice

7.1.6 Subfunction: Identify and maintain POC info
Performed by: LO, RECO, data administrator
Location: LO, ASC, Off-site contractor DC metropolitan area
Description: tracks responsible points of contact and associated amplifying information such as title, phone numbers, e-mail address, and facility .
How Task Performed: (1) LO and/or RECO identify a change to POC info (2) submit the change to ECS HQ (3) data administrator enters data change
Information Used: POC name, POC title, POC address, POC email, fax and phone
Drivers: FedPlan, best management practice

7.1.7 Subfunction: Identify and maintain location info
Performed by: LO, RECO, data administrator
Location: LO, ASC, Off-site contractor DC metropolitan area
Description: tracks project specific location information such as latitude and longitude
How Task Performed: (1) LO and/or RECO identify location information (2) submit info to ECS HQ (3) data administrator enters data change
Information Used: project latitude/longitude
Drivers: FedPlan, best management practice

8.0 SCENARIOS/PROCESS DESCRIPTIONS

This section provides an overview of the current and new project management system. The current project management system is paper based and based upon phone conversations. Because it is paper based, the process is slow, inefficient, redundant, and a lack of data integrity. On the other hand, the new system will be paperless and automated. This will facilitate quicker transactions, enforce data integrity, and reduce the number of transactions necessary to identify and maintain project information. The new system will also provide easy, up-to-date access to project information for those selected in the user group.

8.1 Before the PTS Is Implemented

The process begins with the discovery of an unfunded environmental project at a facility. Within 30 days of this, the corresponding Line Office representative fills out and submits a Project Prospectus Sheet to their appropriate RECO. The Project Prospectus Sheet includes a variety of general project information such as name, description, location, cost estimate, etc.

Within 30 days of receiving the Project Prospectus Sheet, the RECO will validate the project and ensure that an appropriate cost estimate is generated for the project. The RECO will also determine if the project presents a financial environmental liability to NOAA. Project Prospectus Sheets, cost estimates, and other data pertinent to a particular facility's environmental compliance projects will be maintained by the RECO in project files. All environmental project data will then be summarized and submitted by the RECO to the Environmental Compliance Staff at Headquarters.

The final phase in environmental project identification is the validation of project submissions by Headquarters. Headquarters examines the submittal for complete entry and duplication with previous projects. After validation, the project will be assigned a sequential project number. Once the project number has been assigned, headquarters will notify the RECO of the project number. Headquarters will be responsible for the maintenance and the coordinated reconciliation of the project information with any lists, files, or other information held in the field.

Project reviews are also required. Quarterly reviews of environmental projects by the Line Offices and RECOs are critical to maintaining the accuracy of the database. Line Office representatives, with the assistance of a RECO, reviews those projects applicable to their facility on a quarterly basis. This review will validate that those projects are still required and that their scope remains accurately presented. Each RECO will also review and update all projects designated for his or her region of responsibility and forward the results of the review to headquarters.

Semiannual reviews of the cost estimate are also performed by the RECOs. For estimates that require a change, the RECO shall indicate the correct amount. These validations are then sent to headquarters, where they are reviewed and changed.

Throughout the course of the fiscal year, a project's status may change. A project can change from an "active" to a "complete" status or from a "financially liable" to a "non-financially liable" status. A project is "complete" when the work has been completed and the receipt of contracted goods or services has been certified for payment. The RECO shall make this recommendation to headquarters immediately upon meeting these criteria. Headquarters will validate and complete the change by entering the date the project is complete. To indicate that a project is no longer a financial environmental liability but is still an active project, the data field "financial liability" is changed.

In addition, the required data for FedPlan submissions are also submitted by paper at a separate time. Oftentimes, the RECO must duplicate much of the information already submitted to ECS. ECS then must take the paper forms and enter them into a FedPlan software program.

8.2 After the PTS Has Been Fully Implemented

The central database will include all information required to support the development of the environmental compliance portion of NOAA's budgets, spending plans, annual financial statements, and reporting requirements (e.g., Environmental Protection Agency (EPA) FedPlan). The data fields were created by compiling previously used NOAA data fields, data fields from specific reporting requirements, and additional suggested fields.

The process begins with the discovery of an unfunded environmental project at a facility. The facility notifies the appropriate Line Office who directly inputs the necessary data contained in the Project Prospectus Sheet and other information into the database. Through the use of an automated workflow system, the RECO will be automatically notified that a Line Office has submitted project information. The RECO will we review

the information, make any corrections and submit the rest of the required data. Again, through the use of an automated workflow system, ECS will be notified that a project has been submitted and that all information has been included. ECS only has to review it and commit it to the database.

This system will not require separate FedPlan submittals by the RECOs. The required datafields will be built into the system. FedPlan will be submitted by writing the information from the database directly to the FedPlan software disk. The information will not have to be manually entered anymore.

APPENDIX A- FedPlan Report Data Fields

Data Element	Description
Federal Facility Identification Number (FFID)	This data element is comprised of three separate elements: the State code + Agency/Bureau code + GSA installation number.
Facility Name	The name of the facility/installation/activity where the project will be implemented. It is not necessary to include the name of the agency.
Agency Name	The name of the Department or Agency responsible for the project.
Bureau name	The name of the Bureau or MACOM responsible for the project.
Agency/Bureau Code	The four-digit code for the Federal organization responsible for the project. The first two digits are the agency code, the second two digits are the bureau code. For DOD, the bureau code represents the major command (MACOM) or other major organization.
DOD Agency	An indication of whether the facility/installation/ activity is owned or operated by DOD. System generated.
Ownership Type	The applicable two-digit code describing the type of land ownership.
NPL Site	An indication of whether the facility/installation/ activity is on the EPA's National Priorities List (NPL).
EPA Region	The two-digit code (01-10) for the EPA Region in which the project is located. Region code "11" is used for foreign facilities not under EPA jurisdiction.
Facility Latitude	The latitude coordinates for the installation, in degrees, minutes, and seconds as follows: DD^{o} MM' SS.SSSS"
Facility Longitude	The longitude coordinates for the installation, in degrees, minutes, and seconds as follows: DD^{o} MM' SS.SSSS"
Facility Latitude/Longitude Method	The code identifying the method (procedure), datum, and spatial reference used to derive the latitude and longitude.
Facility Street Address	The mailing address of the facility/installation/ activity where the project is located.
Facility City	The name of the locality where the facility/ installation/activity is located.
Facility State	The two-letter abbreviation for the state in which the facility/installation/activity mailing address.

Data Element	Description
Facility ZIP Code	The 5 of 9 digit ZIP code for mailing to the facility/ installation/activity.
Facility Fax Number	The telephone number at which materials can be faxed to the facility.
Country	The code for the country in which the facility is located.
Facility Contact Name	The person who should be contacted for facility-level issues.
Facility Contact Phone	Facility-level contact's commercial phone number.
Facility Contact Address 1	First line of the facility-level contact's mailing address.
Facility Contact Address 2	Second line of the facility-level contact's mailing address.
Facility Contact City	The city in the facility-level contact's mailing address.
Facility Contact State	The two-letter abbreviation for the State in the facility-level contact's mailing address.
Facility Contact ZIP Code	The five or nine digit ZIP code for the facility-level contact's mailing address.
Facility Contact Fax Number	The telephone number at which materials can be faxed to the facility-level contact.
User Flag	
User Field	Optional narrative field for agency notes or additional information.
User Date	Optional user date field.
Federal Facility Identification Number (FFID)	This data element is comprised of three separate elements: the State code + Agency/Bureau code + GSA installation number.
Project Number	The agency-defined identification number for this project. It must be dissimilar from any other active or inactive project number previously used at any facility within the responsible agency.
Project Name	The descriptive name of the environmental project or program.
Building Number	Up to four characters giving the building number assigned by the facility engineer.
Room Number	Up to four characters giving the room number assigned by the facility engineer.
Project Street	The address of the actual location of the project.
Project City	The name of the locality where the project is actually located.
Project ZIP	The 5 of 9 digit ZIP code of the area where the project is located.

Data Element	Description
Multiple Installation	Must be answered "Y" or "N". "Y" indicates project is centrally funded and/or includes projects at several facilities. Do not use "Y" for multiple projects at a single installation.
Operable Unit/Activity Data Sheet Number	Except for DOE, the three digit number, normally found in the IAG, that identifies which operable unit a project is for. Eight digit Activity Data Sheet elements numbers are only used for DOE.
Project Latitude	The latitude for the project, in degrees, minutes, and seconds as follows: DD^{o} MM' SS.SSSS."
Project Longitude	The longitude for the project, in degrees, minutes, and seconds as follows: DD^{o} MM' SS.SSSS."
Project Latitude/Longitude Method	The code identifying the method, datum, and spatial reference used to derive latitude and longitude.
Major Program Area	The code indicates to which major program area the project or activity belongs.
Law/Regulation/Executive Order	The code for the most appropriate of the 17 acceptable environmental laws or group of laws. The multimedia code is only for environmental auditing, program management, and training projects.
Environmental Category (ECAT)	The code describing the category of pollutants controlled by this project. Only ECATs pertaining to the project's Statutory Authority are valid.
Compliance Class	A code that sorts compliance status into five distinct classes.
Compliance Status	The code that identifies the compliance status of the pollution source, operation, function, or activity this project is designed to address.
Compliance Status Sort	A one character code used to sort compliance status codes.
Priority Score	A numerical score between 1.0 and 9.9. The terms high, medium and low are no longer used.
Bureau Priority	A code describing the priority of the project relative to all other projects in the bureau. Bureaus should use their own systems for determining relative priority.
Local Priority	The code that ranks the project in order, relative to all other environmental projects being considered for funding at this facility.
Geographic Initiative	A code used to identify projects as part of a specific EPA geographic initiative.
P2 Component	Indicates whether the project includes a pollution prevention component.

Data Element	Description
P2 Percentage	The percent of the cost of the project that is allocated to pollution prevention, from 0% to 100%, rounded to the nearest five.
P2 Category	A code for the type of pollution prevention component.
Design/Plan Complete	The date, in YYYYMM format, when the design or planning phase of a project is scheduled to be completed.
Construction/Work Start	The date, in YYYYMM format, when the construction or work on a project is scheduled to begin.
Contraction/Work Complete	The date, in YYYYMM format, when the construction or work on a project is scheduled to be completed.
Final Compliance Required	The date, in YYYYMM format, when statutory, regulatory, executive order, or court-ordered compliance is required.
Fiscal Year Completed	The fiscal year in which the project was completed. NOTE: if the data is entered into this field, the Progress Code must be "5".
Progress Code	The one digit code that describes current project status. NOTE: Codes 5 and 6 will cause the project to be listed as inactive.
Reason for Initiation	Identifies for special analysis those projects that fall within certain program areas that receive intense scrutiny from both within and outside the government.
Reason for Discontinuance	Contains a code that clarifies why a project entered as "discontinued" in the Progress Code field is no longer an active project.
Type of Cost	The code for the eight categories used by EPA to define types of environmental costs.
Total Cost Estimate	The current estimate of total cost of the project in thousands of dollars (K). e.g., $3,547,800.00 is entered as 3,547.8
Fiscal Year Funding Required	The fiscal year in which funding must first be received to comply with statutory/regulatory requirements of interagency agreements.
Federal Agency Funding Account Code	The code for the account that the Agency/Bureau will use to fund the project.
Federal Agency Program Element Code	Used to identify the project within the agency's financial accounting structure. Indicates if the project is in the agency's budget.

Data Element	Description
OMB Appropriation Account Identification Code	The OMB appropriation account that applies to the project.
Funding/Unfunded	Indicates whether the project is funded or unfunded. A project is funded if in the year it is scheduled to be accomplished, funds have been programmed and are expected to be available in the Agency's program or budget for the project. This determination should be based on the agency's fiscal guidance to the facility.
Problem	Describes why the project or operable unit was initiated.
Plan	Describes what course of action is being taken on the project or operable unit.
Comment	Agency notes or comments not contained in the problem or plan fields.
Date Project Entered	The date when the project was entered into FEDPLAN-PC (YYYYMM format).
Date Project Revised	The date when the agency project plan was revised (YYYYMM format).
Flag	Agency-defined logical field. Not reviewed by EPA.
Field	Agency-defined field. Not reviewed by EPA.
Date	Agency-defined field. Not reviewed by EPA.
EPA Law/Regulation/Executive Order	EPA's correction to the Law/Regulation/Executive Order field. This contains the code for the most appropriate of the 17 acceptable environmental laws or group of laws. The multimedia code is only for environmental auditing, program management, and training projects.
EPA Environmental Category (ECAT)	EPA's correction to the Environmental Category field. This contains the code describing the category of pollutants controlled by this project. Only ECATs pertaining to the project's Statutory Authority are valid.
EPA Compliance Class	EPA's correction to the Compliance Class field. This contains a code indicating the relative importance of a project or activity.
EPA Compliance Status	EPA's correction to the Compliance Status field. This contains the code that identifies the compliance status of the pollution source, operation, function, or activity this project is designed to address.
EPA Priority Score	EPA's correction to the Priority Score field. This contains a numerical score between 1.0 and 9.9. The terms high, medium and low are no longer used.

Data Element	Description
EPA Total Cost Estimate	EPA's correction to the Total Cost Estimate field. this contains the current estimate of total cost of the project in thousands of dollars (K). (e.g., $3,547,800.00 is entered as 3,547.8)
EPA Fiscal Year Funding Required	EPA's correction to the Fiscal Year Funding Required field. This contains the fiscal year in which funding must first be received to comply with statutory/regulatory requirements of interagency agreements.
EPA Final Compliance Required	EPA's correction to the Final Compliance Required field. This contains the date, in YYYYMM format, when statutory, regulatory, executive order, or court-ordered compliance is required.
EPA Bureau Priority	EPA's correction to the Bureau Priority field. This contains the code describing the priority of the project relative to all other projects in the bureau.
EPA Local Priority	EPA's correction to the Local Priority field. This contains the code that ranks the project in order, relative to all other environmental projects being considered for funding at this facility.
EPA Comment	EPA's comments on and corrections to the Agency data submission.
Project Representative Name	The name of the person responsible for, or knowledgeable about the status of the project.
Project Representative Telephone	The commercial telephone number where the project representative can be reached.
Project Representative Fax Number	The commercial telephone number where materials can be faxed to the project representative.
Project Contact Name	The person who should be contacted for project-level issues.
Project Contact Phone	Project-level contact's commercial phone number.
Project Contact Address 1	The first line of the project-level contact's mailing address.
Project Contact Address 2	The second line of the project-level contact's mailing address.
Project Contact City	The city in the project-level contact's mailing address.
Project Contact State	The two-letter abbreviation for the State in the project-level contact's mailing address.
Project Contact ZIP Code	The ZIP code for the project-level contact's mailing address.
Project Contact Fax Number	The commercial telephone number where materials can be faxed to the project-level contact.

Data Element	Description
Federal Facility Identification Number (FFID)	The FFID is comprised of three separate elements: the State code + Agency/Bureau code + GSA installation number.
Project Number	The agency-defined identification number for this project. It must be dissimilar from any other active or inactive project number previously used at any facility within the responsible agency.
Funding Source	Internal source of funding for agency tracking purposes.
Fiscal Year	The earliest feasible and executable year that the project will be completed before the date final compliance is required.
Estimated Cost	The estimated cost of needed projects required for the agency to remain in or return to full compliance with all environmental laws and regulations. These figures are used to develop budget submissions. Costs are entered in thousands of dollars (K). (e.g., $4,430,600.00 is entered as 4,430.6)
Programmed/Budgeted	The estimated cost of projects for the years in which funds are actually expected to be received. Costs are entered in thousands of dollars (K). (e.g., $4,430.600.00 is entered as 4,430.6)
Obligated	The amount obligated against the project or actually spent on the project execution. There should be no entries for future fiscal years, unless the funded account consists of no-year money. Costs are entered in thousands of dollars (K). (e.g., $4,430,600.00 is entered as 4,430.6)
EPA Estimated Cost	EPA's recommended correction to the Estimated Cost field. This field contains the estimated cost of needed projects required for the agency to remain in or return to full compliance with all environmental laws and regulations. These figures are used to develop budget submission. Costs are entered in thousands of dollars (K). (e.g., $4,430,600.00 is entered as 4,430.6)
Date Changed	The date that budget information for this fiscal year was updated (in YYYYMM format).

APPENDIX B- PTS Support Functions

Describes are those functions necessary to design, develop, and maintain the PTS.

Oracle DBA

The Oracle database administrator will be required on a part time basis to monitor system backup, recoveries, and most importantly table space. The responsibilities of the Oracle DBA is to manage the Oracle environment in which the PTS will be deployed.

PTS Administrator

The PTS Administrator is responsible for identifying missing data fields, maintaining user profiles, and extracting data. The responsibilities of the PTS administrator is a level lower than the Oracle DBA, in which the administrator will maintain the PTS.

Training/Help Desk

The following steps must be completed to implement a training program or help desk. They are to establish a training curriculum, a training presentation, conduct training, generate a user manual, integrate "on-line help," and establish a help desk.

Upgrade/Enhancements

To field, collect, compile, and analyze trouble reports and software engineering change proposals. At the discretion of NOAA HQ, RECOs, and LOs implement, test, and deploy those agreed upon enhancements.

Configuration Management

As a result of upgrades and enhancements made to the PTS, each release will be maintained and tracked in accordance with standard configuration management practices. In the event a new release has major problems, proper configuration management will allow the developer to rebuild previous configuration, thus eliminating system down time.

APPENDIX C- PTS Suppliers

Suppliers are being defined as any entity that is furnishing some form of infrastructure—aiding in the PTS development, assisting in the implementation of the PTS, and sustaining PTS maturity and/or maintenance.

Information

This is nothing more than the information that is required to support the core functions and work activities, and/or satisfy the drivers described previously. Those responsible for supplying, maintaining, and/or using the information contain in the PTS are listed below.

1. Line Office
2. RECO
3. ECS
4. NOAA HQ
5. EPA
6. Contractors
7. PTS Administrator

Network

All network requirements shall be provided by and maintained within the confines of each user's infrastructure and therefore will not be the responsibility of the PTS developer or system administrator. These requirements include any hardware or software necessary to connect a computer to an existing network.

1. Wide Area Network (WAN) – Under current NOAA HQ funding and policy, the necessary infrastructure to support all network functions will be provided and maintained.
2. Local Area Network (LAN) - Under current funding and policies, the necessary infrastructure to support all network functions will be provided and maintained by each facility.
3. Dial-In Network Access – NOAA HQ and ECS will coordinate dial-in access to those customers without WAN/LAN connectivity.
4. Intranet / Intranet – All web-based requirements shall be met under the close cognizance of NOAA HQ network administrators.

Software

PTS shall be a customized information system based upon the combinations of requirements, drivers, and/or constraints described previously. Because of this, all required software shall either be provided directly by NOAA or by the developer under the guidelines of Government Furnished Equipment (GFE).

1. COTS – Any COTS system/software either requiring tailoring or to be used as part of the customized solution, shall be provided NOAA and coordinated with the developer.
2. Vendor Licenses – All software licenses, specifically number of users, shall be the responsibility of NOAA HQ and fully coordinated with the developer, vendor, and NOAA ECS.

Hardware

In addition to the hardware assumed and described under the network section, two hardware requirements exist: (1) Server; and, (2) Administrator Computer. These requirements are outlined and briefly described below.

1. Server – The PTS will require a dedicated server providing the PTS Administrator with access at will. The specifications required for this server shall be identified and coordinated with NOAA ECS and developer.
2. PTS DBA Computer - The PTS administrator will require a dedicated computer to allow for the maintenance of data-fill, user profiles, reporting, etc. In addition, this computer, preferably, a notebook, shall allow the administrator to conduct duties other than database maintenance.

APPENDIX D- PTS Customers

For the purposes of this ConOps, customers have been defined as those either utilizing the system as a routine user, as well as those that utilize the data in some form or another such as status report or as an input to a large annual report. The anticipated PTS customers are outlined and described below.

NOAA HQ

NOAA headquarters refers to any user in the headquarters office other than ECS. For instance, this can be a user from the Office of Finance and Administration. NOAA HQ are usually data users however they may provide budgetary input as well.

NOAA ECS

The Environmental Compliance Staff at NOAA HQ utilizes the database for various reasons as specified in the core functions. ECS uses the data and also provides input in the form of budgetary information and changes made to incorrect LO and RECO inputs.

RECO

The RECOs provide information as well as uses information. The RECOs input all information except for funded amounts. The RECOs can make changes to existing information as well.

Line Office

The LO provides information as well as uses information. The LO provides basic information such as project description and cost estimates.

EPA

The EPA primarily uses the information but they can provide data input as well. The EPA will receive the information in the form of FedPlan submittals. As part of FedPlan, the EPA can send comments back to NOAA ECS regarding certain data fields.

Commerce

Commerce will utilize the database information when preparing budgets.

Congress

Congress will also indirectly utilize the database information for determining budgets.

General Counsel

General Counsel may use this information with respect to financial liabilities and compliance. They are concerned with what law, if any, NOAA is not in compliance with and the consequences thereof.

Contractor

Under the direction of NOAA HQ, RECOs and LOs, a contractor may need to use database information to fulfill contracted tasks. Moreover, a contractor must maintain the database application and data itself knowledgeable with the program.

APPENDIX E- PTS Context Diagram and Matrices

Each information system comprises outside forces that drive its design, development, and life cycle support, specifically its core functionality. These forces have been categorized into four separate areas: (1) drivers and constraints; (2) customers/users; (3) suppliers; and, (4) support functions. These four areas are summarized in the PTS Context Diagram.

This ConOps contains 2 matrices that provide a more comprehensible depiction of the core functions, associated work activity, location responsible for the work activity, and the required information needed to complete the work/tasks. These matrices, Attachment B, Function versus Location, and Attachment C, Function versus Information are briefly described below.

Function vs. Location

This matrix lists the core functions and all associated work/tasks, and the customer or user base that have been outlined previously, as well as depicted in Attachment A, PTS Context Diagram. The sole purpose of this attachment is to illustrate in matrix form the relationship between the core functions and the location where this function is performed. In other words, who is responsible for what.

Information vs. Function

This matrix lists the required information, and the core functions and all associated work/tasks that have been outlined previously, as well as depicted in Attachment A, PTS Context Diagram. The sole purpose of this attachment is to illustrate in matrix form the relationship between the information and core functions. In other words, what information is required to support what function and associated work activity.

See the email attachments

APPENDIX F- PTS Drivers and Constraints

Drivers and constraints associated with the development of the NOAA Project Tracking System are outlined and described within this section. Much of the drivers and constraints are the result of regulatory activity such as Regulations, Executive Orders, Policy Memos, etc. These documents are available through the NOAA Environmental Compliance Staff office. These regulatory activities serve a dual purpose as both drivers and constraints. For example, the project tracking system was developed to meet certain regulatory requirements however, these regulatory requirements also put constraints upon the system.

FedPlan

FedPlan has a software tool developed by the EPA written in FoxPro. This software was made available to all federal agencies to assist them in tracking and reporting their environmental projects. FedPlan allows agencies to provide EPA with annual environmental reports by simply supplying a copy of their project datafill or database. FedPlan, however, does not provide all the information that NOAA HQ utilizes for their own internal purposes. For instance, FedPlan does not provide a method to identify and track financial liabilities. It also does not provide a place for NOAA to discern construction projects from environmental projects. At a minimum, our database tracks the same information for individual projects as described in the FedPlan program and encompasses the ability to generate the annual end-of-year report. We are currently tasked to write the database data to the FedPlan software program.

Chief Financial Officer's Act (CFO Act)

Each year NOAA must report their financial liabilities. The database includes the necessary data fields to support the CFO Act. For instance, it includes standard budgetary information such as total cost estimate, amount budgeted per FY, the actual cost, and the financial liability amount. Other related information, not specifically designated by a database field, can be entered into the "notes" section of the database and extracted for the report.

Government Performance & Results Act (GPRA)

NOAA must comply with this act by reporting and documenting progress towards its performance goals. One such goal is to reduce the number of environmental projects and its financial liabilities. The database can sort projects based on their completion dates to produce a list of all completed projects. This list is important for GPRA reporting because it provides a measure of success in attaining program goals.

Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA)

CERCLA states that each agency shall include in its annual budget submission to the Congress a review of alternative agency funding which could be used to provide for the costs of remedial action. It should also include a statement of the hazard posed by the facility to human health, welfare and the environment and identify the specific consequence of failure to begin and complete remedial action. The database includes the necessary fields to assist with this reporting requirement. For instance, the "narrative"

field includes the rationale for the project—specifically the hazard posed and the consequences of failing to take action. The "notes" section can be utilized to store information regarding alternative agency funding.

The database also supports the annual report to Congress on Cleanup Activities. This report must provide information on a state-by-state basis. The database can sort projects by state to produce such information. Moreover, the database contains a variety of financially related fields. Any other supporting information, not specifically addressed by the data fields, can be added to the "notes" section.

Annual Budget
The database includes the necessary datafields to support NOAA's annual budget submission. It identifies the type of environmental project (training, remediation, etc.) and the costs associated with it. The database allows NOAA to access budgetary information at any point in time.

NOAA Policy
The NOAA Environmental Compliance Policy 97-01: NOAA Environmental Audit Policy, NOAA Environmental Compliance Policy 97-02: NOAA Environmental Project Management Policy, and NOAA Environmental Compliance Policy 97-03: NOAA Shipboard Environmental Compliance and Liability Policy were consulted when designing the system. Requirements and user functions were identified within each of these memos and incorporated into our database. For instance, the Project Management memo requires projects to be sorted by certain datafields and at specific times of the fiscal year. Not yet identified, NOAA Policy surrounding PTS Business Rules will drive such items as database backups, system modifications, data updates, software enhancements, and database triggers. In addition, business rules also have a constraint on user access, read/write/update privileges, etc..

Technology
NOAA has verbally expressed an interest in becoming a paperless office and automating as many processes as possible. NOAA is also looking to update and integrate their automated systems.

User Needs
NOAA ECS needs a method to simplify their project management system. The process begins with the Line Office identifying a potential environmental project and filling out a Project Prospectus Sheet and forwarding it to the respective RECO. The RECO verifies the information and forwards it to HQ. HQ verifies the information and adds it to the list. HQ then gives the RECO a project number to identify the project. This process was time consuming, redundant, cumbersome, and lacked data integrity. ECS is looking to deploy the project tracking system over the network to simplify this process and allow the LOs and RECOs to access the database. However, the presence of an automated workflow system may require analysis and organizational restructuring.

KPMG Audits of 1995 & 1996

A material weakness of the National Oceanic and Atmospheric Administration's (NOAA) as determined by KPMG Peat Marwick, was that "Environmental Liabilities are not properly documented, maintained, or estimated." Among the recommendations associated with the KPMG Peat Marwick report were the need to

> "Prepare written procedures to properly operate and maintain its [NOAA's] environmental liabilities central database, including requiring documentation to support environmental remediation estimates" and "Use the Regional Environmental Coordinator's (RECO) in establishing which estimated environmental costs are probable, reasonably possible or remotely possible, to report the estimated environmental liability on NOAA's financial statements."

The NOAA Corrective Action Plan included a number of steps which apply to the process of developing and maintaining the central database of environmental liabilities, which is a subset of NOAA's central database of environmental projects.

APPENDIX G- Project Prospectus Sheet

PROJECT NUMBER:
Priority Ranking:

ENVIRONMENTAL PROJECT PROSPECTUS FOR D.C.

Short Name of Project:
Simple phrase that differentiates this work from other work at the site

Brief Description of Project:
1-4 sentences that capture the project and gives the reader an idea of where this project starts and stops and whether or not subsequent follow on work may be required

Estimated Cost of Project: (optional, but desired if available)
Funding Citation or Phase Code if modification to existing project
Previous amount authorized and/or funded if applicable
Total Project Cost
Basis of cost estimate--attach supporting documentation
If not other cost estimate, breakdown of costs can be shown here

Description of Problem(s) Project will Resolve:
Brief discussion of regulatory, complieance, or operational problems highlighting degree of contamination or non-compliance. If this project is the result of an audit finding, please list the finding number, date and the protocol area.

Impact of Not Performing Work:
Is the facility out of compliance now because of this problem? Will it be in the future (if so, when)? Is the problem growing in size, degree, or cost? Will not performing the work impact the current or future use of the building, land or water under consideration here?

Project Criticality:
Regulatory Requirement:
Example: RCRA-Resource Conservation and Recovery Act; CAA-Clean Air Act; CWA-Clean Water Act; NEPA-National Environmental Policy Act.

Currently being performed (If yes, by whom?):

Should be performed in next fiscal year (If yes, why?):

Can be deferred, but should be performed within next two fiscal years (If so, when?):

Funding required by date:

Comments: